



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,193	11/04/2003	Osamu Kurosawa	8305-234US (NP61-0002-1)	6237
570 7590 05/08/2009 PANITCH SCHWARZE BELISARIO & NADEL LLP ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			EXAMINER LANG, AMY T	
			ART UNIT 3731	PAPER NUMBER
			MAIL DATE 05/08/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/701,193	<b>Applicant(s)</b> KUROSAWA ET AL.	
	<b>Examiner</b> AMY T. LANG	<b>Art Unit</b> 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

i. Claims 1 and 2 recite wherein the phosphorus compound is selected from the group consisting of phosphites and an ammonium or amine salt. However, the instant specification does not support these compounds. Although page 10 of the instant specification recites the specific use of monophosphites, diphosphites, or triphosphites, the instant specification does not broadly recite phosphites. Therefore, the instant specification only supports the specific phosphites and not the broadly claimed group. Additionally, the instant specification does not support the broadly claimed ammonium or amine salt. The specification only provides support for the specific phosphite or phosphate salts disclosed on page 13 of the instant specification.

ii. Claims 1 and 2 recite wherein the sulfur containing compound comprises a non-molybdenum compound. However, the instant specification does not support this limitation.

iii. Claims 1 and 2 recite wherein the composition comprises a sulfur containing compound selected from the group consisting of thiazoles, thiadiazoles, etc. and an alkaline earth metal sulfonate. However, the instant specification does not recite both a sulfur containing compound selected from the group and an alkaline earth metal sulfonate. Although page 22 of the instant specification recites wherein the composition further includes, in addition to the sulfur containing compound, a metallic detergent such as calcium sulfonate, this recitation does not support the broadly claimed alkaline earth metal sulfonate. Although the instant specification provides support for the narrowly defined sulfur-containing compound and a calcium sulfonate, the instant specification does not provide support for the broadly claimed sulfur containing compound and an alkaline earth metal sulfonate.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrick et al. (US 6,583,092 B1) in view of Komiya et al. (US 2001/0044389 A1) and Sung et al. (US 4,169,799).

Carrick et al. (hereinafter Carrick) discloses a lubricating composition comprising base oil, specifically mineral oil of the paraffinic and naphthenic type, and a specific amount of phosphorus and sulfur (column 4, lines 51-56). The total amount of phosphorus in the composition is disclosed as 0.03 or 0.035 wt% (column 3, lines 49-60) and the total amount of sulfur is 0.07 wt% (column 3, lines 17-25), which clearly overlaps the instant claims. The phosphorus compound is further disclosed as a phosphorus-containing metal salt represented by formula D-1 (column 13, lines 14-25). As shown by Figure D-1, the phosphorus compound comprises a central phosphorus atom and therefore overlaps the claimed phosphite.

The sulfur containing compound is further disclosed as molybdenum dithiocarbamate (column 25, lines 15-17) or an alkylated diphenyl sulfide and derivatives or analogs which clearly overlaps the instantly claimed dihydrocarbylpolysulfide (column 5, lines 1-2). Although the instant claims now recite a non-molybdenum compound, the instant specification does not provide support for this limitation.

Carrick specifically teaches that the saligenin derivative salts provide a partial replacement for sulfonate detergents (column 1, lines 19-27). Therefore, there is some sulfonate present in the lubricating composition. Additionally, the sulfonate detergent is present in the composition at 0.01 wt% (column 4, lines 16-25).

Art Unit: 3731

Carrick further discloses viscosity index improvers, including polymethacrylates having a molecular weight from 20,000 to 500,000 (column 23, lines 15-30). The final lubricating composition comprises a kinematic viscosity from 5 to 16.3 mm<sup>2</sup>/s at 100 degrees Celsius, which clearly overlaps the instant claims (column 3, lines 8-11).

Although Carrick does not specifically disclose the viscosity index improver as a non-dispersion type, the instant disclosure describes this parameter as merely preferable and does not describe it as contributing any unexpected result to the lubricating composition. As such this parameter is deemed a matter of design choice (lacking in any criticality) and well within the skill of the ordinary artisan, obtained through routine experimentation in determining optimum results.

Carrick also does not specifically disclose the kinematic viscosity and %Cp of the mineral oil and the sulfonate detergent as an alkaline earth metal sulfonate.

Carrick discloses a final kinematic viscosity of the composition from 5 to 16.3 mm<sup>2</sup>/s at 100 degrees Celsius. This composition comprises mineral oil and a viscosity index improver up to 10 wt% (column 23, lines 54-60). Therefore, it is the examiner's position that a sufficient amount of viscosity index improver was added to the mineral oil to raise it to 5 mm<sup>2</sup>/s at 100 degrees Celsius from the initial viscosity. Therefore, absent evidence to the contrary, it would have been obvious to one of ordinary skill at the time of the invention for the initial kinematic viscosity of the mineral oil to also overlap the instant claims since a sufficient amount of viscosity index improver is added to the oil to increase the kinematic to 5 mm<sup>2</sup>/s at 100 degrees Celsius.

Komiya et al. (hereinafter Komiya) discloses a lubricating composition comprised of mineral oil, including paraffinic and naphthenic mineral oils ([0002], 0012], [0016]). The disclosed mineral oil has a kinematic viscosity of 1 to 4 mm<sup>2</sup>/s, which clearly overlaps the instant claims ([0014]). Additionally, the % Cp of the oil is disclosed as 70 or higher as defined by ASTM D 3238 ([0012]). It is the examiner's position that the transmission oils disclosed by Carrick and Komiya both contain similar mineral oils, paraffinic and naphthenic oils at the same viscosity, and would therefore display the same characteristics. Komiya specifically uses mineral oil with a % Cp from 75 to 81 since base oil in this range of % Cp displays excellent low temperature fluidity (Table 1, page 8, [0013]). Therefore, it would have been obvious to one of ordinary skill at the time of the invention for the transmission disclosed by Carrick to comprise a base mineral oil having a % Cp from 75-81 for the advantages of enhanced low temperature fluidity as taught by Komiya.

Sung et al. (hereinafter Sung) teaches that alkaline earth metal sulfonates are well known in the art as sulfonate detergents for use in lubricating compositions (column 9, lines 48-49). Therefore, it would have been obvious at the time of the invention for Carrick to utilize an alkaline earth metal sulfonate for the disclosed sulfonate detergent.

### ***Response to Arguments***

6. Applicant's arguments filed 02/17/2009 have been fully considered but they are not persuasive.

Specifically, applicant argues (A) that lubricating oils for engines are completely different from lubricating oils for transmissions.

With respect to argument (A), the lubricating oil disclosed by Carrick is suitable for use as a transmission oil since it comprises greater than 50 wt% base oil (column 3, lines 1-7). Additionally, the instantly claimed transmission oil is an intended use phrase that is given minimal patentable weight. The examiner's position is supported by case law, which holds that "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation." *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) and MPEP 2111.02. Since the term transmission oil is only an intended use phrase and the engine oil disclosed by Carrick is suitable to lubricate a transmission, Applicant's arguments are not persuasive.

Specifically, applicant argues (B) that there is no motivation to combine Carrick with Komiya or Sung since Carrick teaches an engine lubricant, Komiya teaches a transmission lubricant, and Sung teaches a diesel engine lubricant. Therefore, Applicant argues there would have been no motivation to combine these references.

With respect to argument (B), although Carrick, Komiya, and Sung teach lubricating oils with slightly different final intended uses, Applicant's argument is not persuasive. Komiya is used only for the base oil, and not for the final product. The same base oils are routinely used in transmission and engine lubricants. Furthermore, Carrick specifically teaches the engine oil for diesel engines, similar to Sung (see



Art Unit: 3731

column 4, lines 26-29 of Carrick). Additionally, all three references disclose lubricating compositions so that they are similar in nature.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMY T. LANG whose telephone number is (571)272-9057. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/04/2009

/Amy T Lang/

Examiner, Art Unit 3731

/Anhtuan T. Nguyen/

Supervisory Patent Examiner, Art Unit 3731

5/6/09